#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

2812

Applicant:

Randhir P.S. Thakur et al.

Title:

HIGH PRESSURE ANNEALS OF INTEGRATED CIRCUIT STRUCTURES

Docket No.:

303.275US2

Filed:

January 16, 2001

Examiner:

Richard A. Booth

Commissioner for Patents Washington, D.C. 20231



Serial No.: 09/761,355 Due Date: July 26, 2002

Group Art Unit: 2812

COPY OF PAPERS ORIGINALLY FILED

We are transmitting herewith the following attached items (as indicated with an "X"):

- A return postcard.
- An Amendment and Response under 37 CFR § 1.111 (8 Pages).
- Petition for Extension of Time (1 pg.)
- A check in the amount of \$400.00 to cover the Extension of Time Fee.
- A check in the amount of \$702.00 to cover the fee for additional claims as calculated below.
- Clean Version of Pending Claims (6 pgs.).

We are transmitting herewith the following attached items (as indicated with an "X"):  X A return postcard. X An Amendment and Response under 37 CFR § 1.111 (8 Pages). X Petition for Extension of Time (1 pg.) X A check in the amount of \$400.00 to cover the Extension of Time Fee. X A check in the amount of \$702.00 to cover the fee for additional claims as calculated below. X Clean Version of Pending Claims (6 pgs.).  If an additional fee is required due to changes to the claims, the fee has been calculated as follows:						AUG -7 2002 TECHNOLOGY CENTER 2800
CLAIMS AS AMENDED						
	(1) Claims Remaining After Amendment		(2) Highest Number Previously Paid For	(3) Present Extra	Rate	Fee
TOTAL CLAIMS	31	-	20	11	x 18 =	\$198.00
INDEPENDENT CLAIMS	9	-	3	6	x 84 =	\$504.00
[] MULTIPLE DEPENDENT CLAIMS PRESENTED						\$0.00
TOTAL						\$702.00

Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional required fees or credit overpayment to Deposit Account No. 19-9743.

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Reg. No. 25,179

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on this 26th day of July, 2002.

Name

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Customer Number 21186

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(GENERAL)

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UL 3 1 2002

# AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Commissioner for Patents Washington, D.C. 20231

Applicant has reviewed the Office Action mailed on <u>February 26, 2002</u>. Please amend the above-identified patent application as follows.

This response is accompanied by a Petition, as well as the appropriate fee, to optain a 2-month extension of the period for responding to the Office action, thereby moving the deadline for response from May 26, 2002 to July 26, 2002.

### **IN THE CLAIMS**

Please substitute the claim set in the appendix entitled Clean Version of Pending aims for the previously pending claim set. The substitute claim set is intended to reflect cancellation of claim 48, amendment of previously pending claims 42 and 59, and addition of new claims 72 through 99. The specific amendments to individual claims are detailed in the following marked up set of claims.

Please cancel claim 48 without prejudice and amend the following claims:

42. (Amended) An interconnect structure formed in a contact hole overlying a supporting substrate, comprising:

a titanium silicide layer on the supporting substrate in the contact hole, wherein the contact hole has an aspect ratio of at least 2:1;

an aluminum plug fill, relatively free of voids, <u>formed on [supported by]</u> the titanium silicide layer <u>by a CVD process at a pressure of at least approximately 1.1 atmosphere</u>; and

a metal line electrically coupled to and formed over the aluminum plug fill.

504.00 UP 198.00 UP 460.00 UP

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